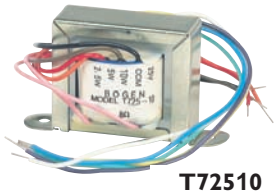
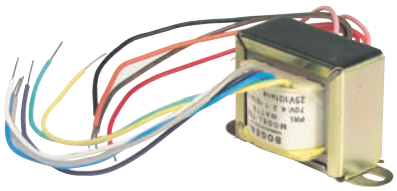
Transformers

Speaker Impedance Matching Models:
T725 & T72510

Line Impedance Matching Models:
TL100, TL600, & WMT1A

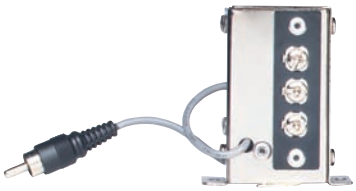


T72510



T725

TL100/TL600



WMT1A

Description

T725, T72510

The Bogen Models T725 and T72510 transformers are speaker-matching transformers that allow an 8-ohm speaker to be connected to 70V or 25V amplifier outputs. An 8-ohm secondary connects to the speaker and the multi-tap primary connects to the 70V or 25V amplifier output.

The T725 can be tapped at 4, 2, 1, 1/2, 1/4, and 1/8 watts, while the T72510 can be tapped at 10, 5, 2-1/2, 1-1/4, and 5/8 watts. All wires are easily accessible.

TL100, TL600

The Bogen Models TL100 and TL600 line impedance-matching transformers are compact, plug-in units specially designed for use with power amplifiers.

The TL100 provides a balanced 1:1 input match and isolation; its primary impedance will be the same value as total termination of the input impedance to the amplifier(s).

Model TL600 impedance matches the output of a 600-ohm telephone line to a Bogen power amplifier input.

WMT1A

The Bogen Model WMT1A transformer is designed especially for impedance-matching inputs from, or outputs to, a 600-ohm line. The WMT1A has a Hi-Z, 10k-ohm primary impedance and a Lo-Z, 600-ohm secondary impedance balanced with a center tap.

As an input-matching transformer, it may be used to connect telephone systems to most Bogen public address amplifiers for telephone paging. It also functions as an output-matching transformer in feeding program material over a 600-ohm telephone line (typically for "music-on-hold" applications). The WMT1A is compatible with any amplifier having a 25V output terminal.

Features

T725 and T72510

- Allows an 8-ohm speaker to connect to 70V or 25V amplifier outputs
- T725 Power Taps: 4, 2, 1, 1/2, 1/4, 1/8 watts
- T72510 Power Taps: 10, 5, 2-1/2, 1-1/4, 5/8 watts
- Easily-accessed, stripped and tinned wire terminations
- Small, compact, and cost-effective

TL100 and TL600

- Provides balanced, isolated, 1:1 or 600-ohm input for power amplifiers
- Transformer connections terminated in a keyed nine-pin miniature plug
- Compact, plug-in design
- Internal mumetal shielding

WMT1A

- Hi-Z, 10k-ohm primary impedance
- Lo-Z, 600-ohm secondary impedance, balanced with center tap
- Matches high-to-low impedance or low-to-high impedance
- Adapts line-level signals to microphone inputs
- RCA connector for Hi-Z side
- Screw terminals for Lo-Z side
- Small steel enclosure with mounting ears allows easy mounting
- No wiring or soldering required
- May be used to provide a 600-ohm output from a Bogen mixer/pre-amplifier

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Specifications subject to change without notice.

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Technical Specifications

T725, T72510

Function:	Allows 8-ohm speaker to connect to 70V or 25V amplifier outputs
Frequency Response:	*T725* – 70 Hz to 10 kHz
	T72510 – 50 Hz to 20 kHz
Taps:	*T725* – 4, 2, 1, 1/2, 1/4, and 1/8 watts
	T72510 – 10, 5, 2-1/2, 1-1/4, and 5/8 watts
Dimensions:	*T725* – 2-1/2" W × 1-1/4" H × 1-3/8" D
	T72510 – 3" W × 1-1/2" H × 1-1/2" D
Product Weight:	*T725* – 6 oz.
	T72510 – 10 oz.

TL100, TL600

Function:	*TL100* – Provides balanced 1:1 input impedance match and isolation
	TL600 – Provides balanced 600-ohm input impedance match and isolation
Frequency Response:	*TL100* – 20 Hz to 15 kHz, ±2 dB;
	TL600 – 20 Hz to 20 kHz, ±1 dB
Hum Reduction:	Mumetal shielding
Construction:	Cylindrical shape, keyed nine-pin miniature plug
Dimensions:	1" Dia. × 1-1/4" D
Product Weight:	1 oz.

WMT1A

Function:	Impedance matches inputs/outputs to a 600-ohm line
Frequency Response:	50 Hz to 20 kHz ±2 dB
Sensitivity:	Less than 0.1V across 600-ohm line required for full output power from average amplifier; Maximum level +20 dBm
Output:	Approx. 1.73V output when connected across 25V output tap or WMT1A Hi-Z output connection on a Bogen amplifier
Dimensions:	2" W × 2-3/8" H × 1-1/4" D
Product Weight:	4 oz.

Architect and Engineer Specifications

T725

The impedance-matching transformer shall be a Bogen Model T725, or equivalent, capable of matching the 70V or 25V output of an amplifier. An 8-ohm secondary shall connect to a speaker, and a multi-tap primary shall connect to the 70V or 25V amplifier output. Available power taps shall be 4, 2, 1, 1/2, 1/4, and 1/8 watts. The unit shall measure 2-1/2" W × 1-1/4" H × 1-3/8" D. The unit shall weigh approx. 6 oz.

T72510

The impedance-matching transformer shall be a Bogen Model T72510, or equivalent, capable of matching the 70V or 25V output of an amplifier. An 8-ohm secondary shall connect to a speaker, and a multi-tap primary shall connect to the 70V or 25V amplifier output. Available power taps shall be 10, 5, 2-1/2, 1-1/4, and 5/8 watts. The unit shall measure 3" W × 1-1/2" H × 1-1/2" D. The unit shall weigh approx. 10 oz.

TL100

The line-matching transformer shall be a Bogen Model TL100, or equivalent, and shall provide a balanced 1:1 input and isolation. The primary impedance shall be the same value as the total termination of the input impedance to the amplifier(s). The frequency response shall be within ±2 dB from 20 Hz to 15 kHz. The unit shall incorporate mumetal shielding for hum reduction. The transformer connections shall terminate in a keyed nine-pin miniature plug, which shall fit into a matching nine-pin receptacle. The transformer shall be cylindrical in shape with a 1" diameter and the overall length (including pins) shall not exceed 1-1/4".

TL600

The line-matching transformer shall be a Bogen Model TL600, or equivalent, and shall match a balanced 600-ohm zero level transmission line, or provide a 600-ohm output from a pre-amplifier. The secondary impedance shall be 10k ohms. The frequency response shall be within ±1 dB from 20 Hz to 20 kHz. The unit shall incorporate mumetal shielding for hum reduction. The transformer connections shall terminate in a keyed nine-pin miniature plug, which shall fit into a matching nine-pin female receptacle. The transformer shall be cylindrical in shape, with a 1" diameter and the overall length (including pins) shall not exceed 1-1/4".

WMT1A

The line-matching transformer shall be a Bogen Model WMT1A, or equivalent, capable of matching either inputs from, or outputs to, a 600-ohm line. It shall provide a perfect impedance match between a 600-ohm balanced line and the high-impedance input of an amplifier, or the 25V output of an amplifier. Frequency response shall be ±2 dB from 50 Hz to 20 kHz. Less than 0.1 volt across a 600-ohm line shall be required for full output power from an average amplifier (maximum level, +20 dBm). Output shall be approximately 1.73 volts when connected across the 25V output tap or WMT1A Hi-Z output connection of a Bogen amplifier.

Line input or output connections from the 600-ohm line shall be made via a three-screw terminal strip. Connection to the auxiliary input of an amplifier shall be by means of a shielded cable terminated in an RCA plug. Provisions shall be included to connect the unit to a microphone input. The mounting bracket shall allow the transformer to be mounted by means of two steel screws. The unit shall measure 2" W x 2-3/8" H x 1-1/4" D and the product weight shall be 4 oz .

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